1986
Financial
Ratio
Study

Typographers'
Ratios

Volume XI

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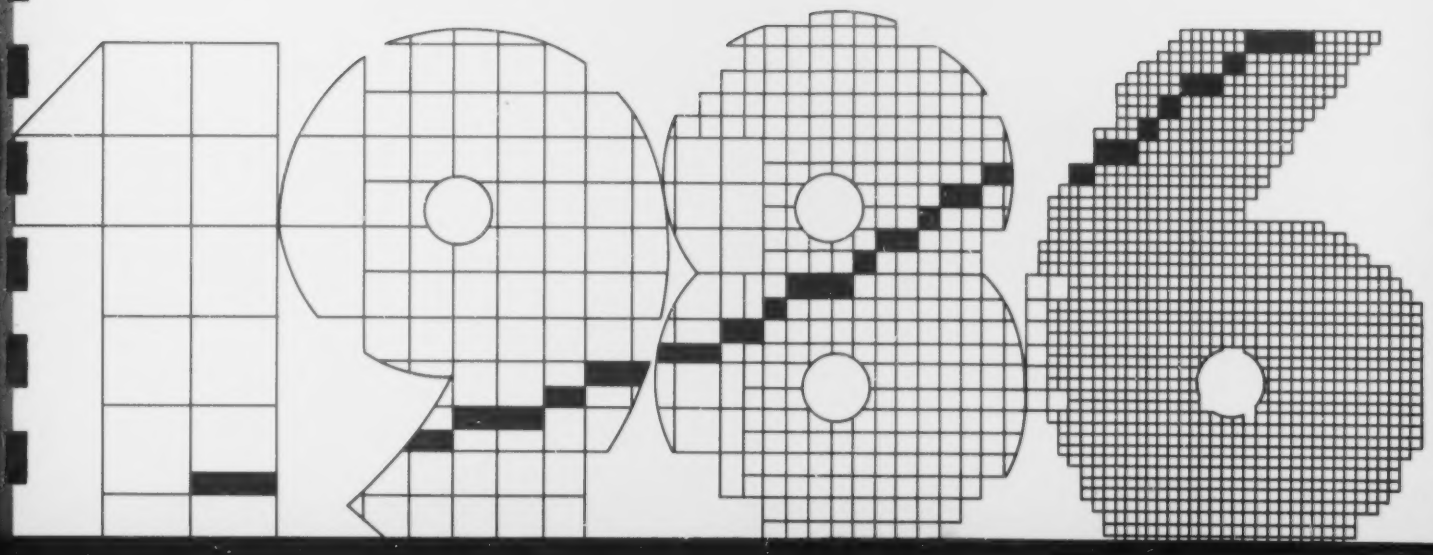

63RD annual ratio study compiled from the operating statements and balance sheets submitted by representative members of the printing industry, and computed by RGS Enterprises, Inc., 1 Carlisle Drive, Arnold, Maryland 21012.

1986 FINANCIAL RATIOS

TYPOGRAPHERS

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PRINTING INDUSTRIES OF AMERICA, INC.

Member Programs Group
1730 North Lynn Street
Arlington, Virginia 22209

Edited and Prepared by H. R. Margolis Company,
Certified Public Accountants
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Printed in U.S.A.

H. R. MARGOLIS COMPANY

CERTIFIED PUBLIC ACCOUNTANTS

OFFICES:
PHILADELPHIA
NEW YORK

Dear Member of the Graphic Arts Community:

H. R. Margolis Company is pleased to have once again participated with PIA and the graphic arts community ... compiling these financial ratios. In all, 979 graphic arts firms of various types took part in the 1986 study. This particular volume is the result of financial information contributed by 24 Typographers across the United States and Canada.

To help readers compare their own financial statements to those of other firms, the data is presented here by sales volume - for example, sales to $500,000, sales from $500,000 to $1,500,000, etc.; and by market - for example, Printers and Lithographers, Advertising Agencies, etc. Readers can compare their firm's operations with other firms having the same sales volume or market in four areas: Operations based on Sales and its Supporting Schedules, Balance Sheet Ratios, Significant Facts and Return on Investment.

The importance of sharing this type of information among the members of the graphic arts community cannot be overemphasized. Such a comparative analysis enhances the health of both individual firms and the graphic arts industry as a whole. Consequently, we urge that all firms put these ratios to use in making effective and profitable financial decisions.

H. R. Margolis Company

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PRINTING INDUSTRIES OF AMERICA, INC.

1730 North Lynn Street, Arlington, VA 22209 (703) 841-8100

1986 is the 63rd year in which Printing Industries of America, Inc. has collected and published detailed financial ratio information for members of the graphic arts community. The data presented each year provide a detailed and comprehensive picture of the financial status of the major segments of the graphic arts industries in the U.S. and Canada. It allows individual firms to compare their annual performance with that of many other similar firms, including those which earn well above-average profits. Ratio results are published annually. They are summarized as follows:

- Management Guide to the PIA Ratios
- All Printers by Sales Volume
- All Printers by Product Specialty
- All Printers by Geographic Area
- Sheetfed Printers by Size and Geographic Area
- Web Offset Printers — Heatset
- Web Offset Printers — Non-Heatset
- Combination Offset — Sheetfed/Web
- Book Manufacturers' Ratios
- Large Printers' Ratios
- Typographers' Ratios
- Preparatory Specialists' Ratios
- Binders' Ratios
- Quick Printers

For a more complete composite picture of your company's performance relative to the industry as a whole, several books could be used in your analysis, such as one of the overview volumes, e.g., *All Printers by Sales Volume*, and one that addresses your particular business segment or production process, e.g., *Book Manufacturers or Web Offset — Heatset*, respectively. Alternatively, such analysis is facilitated by participating in the Ratio Study each year and ordering an individual company computer printout which compares a participant's ratios to those of companies which are similar in size and sales volume, produce the same products, and use the same manufacturing process.

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The National Composition Association (NCA), founded in 1964, is a National Affiliate of PIA. With over 700 active members and subscribers, NCA is the world's leading association for the computerized composition industry. Through its publications program and its slate of educational conferences in cities throughout North America, NCA provides extensive current information on technology and equipment, business management and operations, and typography and aesthetics.

The NCA publications program issues frequent new monographs and studies, a monthly newsletter, and the NCA Reports looseleaf binder of supplementals. Included among NCA's many national educational conferences is the annual convention, held in conjunction with Type-X, the world's largest annual exhibition of composition equipment and software. Like all NCA conferences, the annual convention offers a large number of information-packed seminars and briefings by leading figures and authorities from the industry.

NCA also sponsors the annual Typographic Excellence Awards competition to recognize production excellence and high standards in typography. In addition, the association sponsors a number of other programs, such as the Benchmark Reports for increased production efficiency, a technical inquiry service, an electronic bulletin board, and software.

NCA is governed by its own Board of Directors and is a self-supporting contributor to the efforts of the PIA federation. We are pleased to endorse the PIA Ratio Reports and encourage your participation in this vital program.

Tina H. Allman
President
National Composition Association
(703) 841-8165

CHAPTER 1 - BY SIZE OF FIRM

REPORT ON OPERATIONS - SALES = 100%

	ALL FIRMS REPORTING		SALES TO $500,000	
	ALL FIRMS	PROFIT LEADERS*	ALL FIRMS	PROFIT LEADERS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%	100.00%	100.00%	100.00%
FACTORY COST OF PRODUCT				
MATERIALS				
Paper	1.57	2.96	0.95	2.84
Other chargeable materials	3.35	2.29	3.05	2.39
Outside services	5.40	7.26	5.76	16.30
TOTAL MATERIALS	10.32	12.51	9.76	21.53
FACTORY PAYROLL	42.41	39.14	38.17	33.81
FACTORY EXPENSES	17.08	14.84	24.54	15.81
TOTAL FACTORY COST OF PRODUCT	69.81	66.49	72.47	71.15
GROSS PROFIT	30.19	33.51	27.53	28.85
ADMINISTRATIVE AND SELLING EXPENSES				
Administrative expenses	15.03	13.86	18.06	13.83
Selling expenses	10.51	7.70	6.09	4.90
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	25.54	21.56	24.15	18.73
INCOME BEFORE INTEREST EXPENSE	4.65	11.95	3.38	10.12
Interest expense	1.58	1.17	1.09	0.77
OPERATING INCOME	3.07	10.78	2.29	9.35
Other income (expense)	0.34	0.37	0.97	0.23
INCOME BEFORE INCOME TAXES	3.41	11.15	3.26	9.58

SUPPORTING SCHEDULES - SALES = 100%

OTHER CHARGEABLE MATERIALS				
Ink	0.01%	0.00%	0.00%	0.00%
Film	1.68	1.49	1.90	0.00
Plates	0.10	0.00	0.00	0.00
Other chargeable materials	1.56	0.80	1.15	2.39
TOTAL OTHER CHARGEABLE MATERIALS	3.35	2.29	3.05	2.39
OUTSIDE SERVICES				
Composition	0.35	0.00	0.29	0.00
Offset preparation	0.26	0.78	0.78	2.35
Printing	2.53	3.96	3.96	11.89
Binding	0.02	0.00	0.00	0.00
Other outside services	2.24	2.52	0.73	2.06
TOTAL OUTSIDE SERVICES	5.40	7.26	5.76	16.30

* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.
** Sample insufficient for Profit Leaders.

SALES FROM $500,000-$1,500,000**	SALES FROM $1,500,000-$3,000,000**	SALES OVER $3,000,000	
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
100.00%	100.00%	100.00%	100.00%
0.62	1.61	3.31	6.02
3.08	4.46	3.65	2.54
7.96	4.18	2.16	1.07
11.66	10.25	9.12	9.63
43.72	43.99	43.91	40.90
14.93	15.10	14.00	12.63
70.31	69.34	67.03	63.16
29.69	30.66	32.97	36.84
16.03	10.82	12.37	11.09
10.77	11.63	13.62	10.68
26.80	22.45	25.99	21.77
2.89	8.21	6.98	15.07
1.88	1.73	1.57	1.04
1.01	6.48	5.41	14.03
0.10	(0.46)	0.36	(0.35)
1.11	6.02	5.77	13.68
0.00%	0.00%	0.05%	0.00%
0.78	3.47	2.25	2.54
0.00	0.00	0.38	0.00
2.30	0.99	0.97	0.00
3.08	4.46	3.65	2.54
0.14	0.40	0.71	0.00
0.12	0.00	0.03	0.00
3.93	0.00	0.17	0.00
0.00	0.00	0.07	0.00
3.77	3.78	1.18	1.07
7.96	4.18	2.16	1.07

SUPPORTING SCHEDULES - SALES = 100%

	ALL FIRMS REPORTING		SALES TO $500,000	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
FACTORY PAYROLL				
Salaries - executive	4.26%	1.30%	7.09%	0.00%
Direct wages	26.14	23.27	23.33	29.24
General factory salaries and wages	3.84	7.18	0.81	0.00
Packing, shipping and delivery wages	1.99	2.33	2.10	0.95
Payroll taxes	3.20	3.13	2.81	2.61
Employee benefits	2.98	1.93	2.03	1.01
TOTAL FACTORY PAYROLL	42.41	39.14	38.17	33.81
FACTORY EXPENSES				
Fixed Expenses				
Depreciation - real estate	0.05	0.00	0.00	0.00
Depreciation - other	4.08	4.73	4.93	5.88
Taxes - real estate	0.02	0.00	0.00	0.00
Taxes - other	0.18	0.15	0.19	0.00
Insurance	0.96	0.96	2.41	1.98
Building rent	2.40	2.56	3.83	4.06
Utilities - heat, light, etc.	0.92	0.74	0.65	0.00
Equipment rental	2.41	0.15	3.76	0.45
Total Fixed Expenses	11.02	9.29	15.77	12.37
Other Expenses				
Factory supplies and expense	1.74	1.59	2.56	0.00
Packing, shipping and delivery expense	1.05	1.03	0.58	0.24
Repairs and maintenance	2.08	2.27	2.47	3.20
Other factory expenses	1.19	0.66	3.16	0.00
Total Other Expenses	6.06	5.55	8.77	3.44
TOTAL FACTORY EXPENSES	17.08	14.84	24.54	15.81
ADMINISTRATIVE EXPENSES				
Salaries - executive	5.68	4.57	5.65	4.22
Salaries - office	2.66	2.32	3.20	0.00
Payroll taxes	0.45	0.43	0.31	0.30
Employee benefits	0.78	0.74	0.38	0.00
Bad debts	0.56	0.99	1.24	2.24
Office supplies and expenses	0.65	0.93	0.91	1.18
Professional fees	0.83	0.56	1.22	0.87
Taxes - business	0.32	0.00	1.07	0.00
Telephone	0.84	1.02	1.21	1.67
Other administrative expenses	2.26	2.30	2.87	3.35
TOTAL ADMINISTRATIVE EXPENSES	15.03	13.86	18.06	13.83
SELLING EXPENSES				
Salaries - executive	1.75	0.13	2.04	0.00
Salaries and commissions - salesmen	4.56	4.46	2.32	2.82
Salaries - sales office clerical	0.45	0.75	0.00	0.00
Payroll taxes	0.39	0.40	0.18	0.20
Employee benefits	0.39	0.24	0.20	0.00
Advertising	0.88	0.86	1.05	1.75
Travel and entertainment	0.90	0.34	0.30	0.13
Other selling expenses	1.19	0.52	0.00	0.00
TOTAL SELLING EXPENSES	10.51	7.70	6.09	4.90

** Sample insufficient for Profit Leaders.

SALES FROM $500,000-$1,500,000**	SALES FROM $1,500,000-$3,000,000**	SALES OVER $3,000,000	
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
2.83%	3.20%	3.99%	3.90%
25.78	28.50	28.34	27.55
7.21	1.68	2.70	1.46
1.74	4.33	1.52	2.29
3.35	3.36	3.31	3.12
2.81	2.92	4.05	2.58
43.72	43.99	43.91	40.90
0.00	0.00	0.17	0.00
3.95	2.50	4.05	3.45
0.02	0.00	0.03	0.00
0.20	0.05	0.18	0.44
0.50	0.84	0.32	0.41
2.26	2.48	1.31	1.54
0.95	1.39	0.96	1.33
2.98	2.86	0.40	0.00
10.86	10.12	7.42	7.17
1.14	1.42	1.89	0.87
0.61	0.76	2.11	2.36
1.76	2.00	2.17	2.12
0.56	0.80	0.41	0.11
4.07	4.98	6.58	5.46
14.93	15.10	14.00	12.63
7.51	1.07	4.64	4.66
1.88	5.04	2.53	1.68
0.58	0.44	0.42	0.50
1.28	0.43	0.58	0.44
0.39	0.49	0.24	0.20
0.61	0.49	0.52	0.61
0.74	0.64	0.66	0.32
0.11	0.01	0.04	0.00
0.90	0.57	0.52	0.83
2.03	1.64	2.22	1.85
16.03	10.82	12.37	11.09
1.70	1.07	1.78	0.40
4.65	7.30	5.56	5.50
0.26	0.00	1.20	2.26
0.43	0.62	0.46	0.68
0.30	0.52	0.65	0.59
1.00	0.24	0.75	0.16
1.41	0.79	0.77	0.63
1.02	1.09	2.45	0.46
10.77	11.63	13.62	10.68

CHAPTER 1 - BY SIZE OF FIRM

BALANCE SHEET

	ALL FIRMS REPORTING		SALES TO $500,000	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
ASSETS				
CURRENT ASSETS				
Cash	8.20%	13.47%	4.57%	12.48%
Receivables	41.02	40.85	42.45	43.15
Inventories	7.68	7.68	2.28	0.00
Other current assets	5.44	4.66	11.84	8.86
TOTAL CURRENT ASSETS	62.34	66.66	61.14	64.49
FIXED ASSETS				
Real estate	4.66	0.36	0.00	0.00
Less: Accumulated depreciation	1.30	0.36	0.00	0.00
	3.36	0.00	0.00	0.00
Machinery and equipment	69.25	92.13	90.44	119.86
Less: Accumulated depreciation	41.97	63.47	57.59	87.26
	27.28	28.66	32.85	32.60
Other fixed assets	6.13	5.87	3.76	2.33
Less: Accumulated depreciation	3.04	3.28	0.90	0.00
	3.09	2.59	2.86	2.33
NET FIXED ASSETS	33.73	31.25	35.71	34.93
OTHER ASSETS	3.93	2.09	3.15	0.58
TOTAL ASSETS	100.00	100.00	100.00	100.00
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Notes payable	11.10	7.81	7.16	11.20
Accounts payable	13.43	5.23	22.00	8.49
Other current liabilities	8.68	14.84	4.50	5.56
TOTAL CURRENT LIABILITIES	33.21	27.88	33.66	25.25
LONG-TERM LIABILITIES	26.36	24.72	38.62	48.00
TOTAL LIABILITIES	59.57	52.60	72.28	73.25
SHAREHOLDERS' AND PROPRIETORS' EQUITY	40.43	47.40	27.72	26.75
TOTAL LIABILITIES AND EQUITY	100.00	100.00	100.00	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.88	2.39	1.82	2.55
QUICK RATIO	1.65	2.12	1.75	2.55
TOTAL LIABILITIES TO EQUITY	1.47	1.11	2.61	2.74
LONG-TERM LIABILITIES TO EQUITY	0.65	0.52	1.39	1.79
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.61	0.69	0.64	0.73

** Sample insufficient for Profit Leaders.

SALES FROM $500,000-$1,500,000**	SALES FROM $1,500,000-$3,000,000**	SALES OVER $3,000,000	
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
10.22%	12.85%	7.37%	10.55%
43.63	39.66	36.83	43.24
7.04	14.03	11.33	19.31
3.05	3.87	3.47	3.50
63.94	70.41	59.00	76.60
4.85	0.00	9.74	1.09
1.69	0.00	2.26	1.09
3.16	0.00	7.48	0.00
72.74	38.37	55.43	61.00
43.04	21.69	33.03	47.78
29.70	16.68	22.40	13.22
5.32	9.16	8.35	10.69
2.96	5.12	4.40	6.21
2.36	4.04	3.95	4.48
35.22	20.72	33.83	17.70
0.84	8.87	7.17	5.70
100.00	100.00	100.00	100.00
9.02	19.73	14.67	3.74
14.87	3.10	7.21	3.45
7.18	19.36	11.13	18.36
31.07	42.19	33.01	25.55
23.52	10.95	23.91	16.05
54.59	53.14	56.92	41.60
45.41	46.86	43.08	58.40
100.00	100.00	100.00	100.00
2.06	1.67	1.79	3.00
1.83	1.34	1.44	2.24
1.20	1.13	1.32	0.71
0.52	0.23	0.56	0.27
0.59	0.57	0.60	0.78

CHAPTER 1 - BY SIZE OF FIRM

SIGNIFICANT FACTS

	ALL FIRMS REPORTING		SALES TO $500,000	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
INVESTMENT				
Average assets per employee - All employees	$ 19,625	$ 18,360	$ 15,015	$ 18,244
Average assets per factory employee (Excluding Executives)	27,702	24,362	24,009	20,597
Average net worth per employee - All employees	8,109	8,776	5,605	5,008
Average gross plant investment per factory employee (Excluding Executives)	20,906	21,819	21,069	23,624
Net worth percentage of fixed assets	112.62%	194.95%	36.90%	78.64%
EMPLOYEES				
Percent factory - All employees	77.40%	79.43%	77.05%	90.00%
Percent administrative - All employees	13.54	13.55	14.97	5.00
Percent sales - All employees	9.06	7.02	7.98	5.00
SALES - VALUE OF PRODUCT PRODUCED INCLUDING EXECUTIVES				
Sales per employee - All employees	$ 46,912	$ 43,856	$ 39,207	$ 45,509
Sales per factory employee	61,211	55,973	50,879	50,309
Sales less material per factory employee	54,061	48,836	45,915	39,491
Sales per administrative employee	414,374	296,279	212,720	191,983
EXCLUDING EXECUTIVES				
Sales per employee - All employees	54,908	46,667	54,715	47,642
Sales per factory employee	66,636	57,582	63,912	50,309
Sales less material per factory employee	59,236	50,291	58,586	39,491
SALES PER SALESMAN	637,517	881,486	122,003	235,106
SALES TO CURRENT ASSETS	423%	374%	477%	391%
PAYROLL - INCLUDING TAXES AND BENEFITS INCLUDING EXECUTIVES				
Total payroll percentage of sales	59.52%	53.18%	52.46%	41.36%
Factory payroll percentage of gross plant investment	134.24	113.89	121.61	78.67
Payroll per employee - All employees	$ 27,500	$ 22,891	$ 19,634	$ 18,251
Payroll per factory employee	25,226	21,908	18,783	16,997
Payroll per administrative employee	35,488	24,611	20,942	17,395
Payroll per sales employee	42,023	27,797	20,252	11,605
PAYROLL - EXCLUDING TAXES AND BENEFITS EXCLUDING EXECUTIVES				
Payroll per employee - All employees	$ 20,911	$ 18,613	$ 15,183	$ 15,478
Payroll per factory employee	20,399	18,748	15,048	15,136
Payroll per administrative employee	14,383	7,931	11,373	0
Payroll per sales employee	31,885	24,401	9,571	10,849
EXECUTIVE PAYROLL				
Payroll per executive - All executives	48,937	27,164	23,423	16,250
Payroll per factory executive	36,580	12,289	17,205	0
Payroll per administrative executive	55,231	37,823	23,621	16,250
Payroll per sales executive	37,150	17,309	13,857	0
RECEIVABLES				
Collection period	58.2	63.8	52.4	68.4
PROFIT				
Gross profit percentage of sales	30.19%	33.51%	27.53%	28.85%
Average gross profit per factory employee	$ 20,095	$ 19,563	$ 17,484	$ 14,458
Income before taxes percentage of sales	3.41%	11.15%	3.26%	9.58%
Average income before taxes per employee	$ 1,765	$ 5,058	$ 1,795	$ 4,420

** Sample insufficient for Profit Leaders.

SALES FROM $500,000-$1,500,000**	SALES FROM $1,500,000-$3,000,000**	SALES OVER $3,000,000	
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
$ 17,737	$ 20,101	$ 25,867	$ 20,737
23,976	30,887	34,746	28,463
7,506	9,439	10,650	12,432
18,757	14,648	25,317	20,571
93.94%	226.46%	169.02%	342.84%
78.15%	67.62%	79.54%	79.10%
12.97	23.90	10.09	9.02
8.88	8.48	10.37	11.88
$ 46,671	$ 45,230	$ 54,306	$ 51,013
60,931	67,406	68,659	64,643
51,847	60,435	62,069	58,423
473,269	206,104	571,005	567,734
53,362	47,398	59,206	56,032
63,195	69,731	72,511	69,470
53,926	62,549	65,674	62,787
277,437	533,140	1,186,831	1,204,675
441%	323%	383%	338%
62.29%	60.48%	61.74%	57.61%
118.64	217.44	141.37	147.24
$ 28,272	$ 27,363	$ 33,289	$ 29,280
25,107	29,529	29,671	26,298
41,697	14,369	46,006	41,336
37,471	50,820	64,024	42,553
$ 21,525	$ 22,028	$ 24,714	$ 22,728
20,780	24,143	23,425	21,580
13,889	10,051	18,834	15,237
30,034	42,143	50,460	35,636
43,078	28,410	84,204	51,592
21,565	28,410	74,826	36,866
44,717	28,410	103,507	83,569
17,193	28,410	85,273	51,927
57.0	63.9	63.0	62.5
29.69%	30.66%	32.97%	36.84%
$ 18,364	$ 21,542	$ 24,146	$ 25,579
1.11%	6.02%	5.77%	13.68%
$ 396	$ 2,683	$ 3,237	$ 7,045

CHAPTER 1 - BY SIZE OF FIRM

RETURN ON INVESTMENT - PER $100 OF SALES

	ALL FIRMS REPORTING		SALES TO $500,000	
	ALL FIRMS	PROFIT LEADERS	ALL FIRMS	PROFIT LEADERS
INVESTMENT				
Current Assets:				
Cash	$ 3.67	$ 6.04	$ 2.88	$ 5.46
Receivables	15.55	16.65	13.80	17.16
Inventories	3.37	3.21	0.49	0.00
Marketable securities	1.32	0.39	3.85	0.00
Other current assets	1.21	1.78	1.87	4.14
	25.12	28.07	22.89	26.76
Plant Investment:				
Land and building	2.57	0.12	0.00	0.00
Machinery and equipment	29.09	39.06	33.11	45.26
Other fixed assets	2.54	2.38	1.32	1.14
	34.20	41.76	34.43	46.40
Non-Current Assets	1.81	0.76	1.32	0.19
TOTAL INVESTMENT	61.13	70.59	58.64	73.35
INVESTMENT TURNOVER PER $100 OF SALES	163.59%	141.66%	170.53%	136.33%
EARNINGS				
Cost of Product	$69.81	$66.49	$72.47	$71.15
Selling Expenses	10.51	7.70	6.09	4.90
Administrative Expenses	15.03	13.86	18.06	13.83
	95.35	88.05	96.62	89.88
Income Before Interest, Other Income (Expense), and Taxes	4.65	11.95	3.38	10.12
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	7.61%	16.93%	5.76%	13.80%

** Sample insufficient for Profit Leaders.

SALES FROM $500,000-$1,500,000**	SALES FROM $1,500,000-$3,000,000**	SALES OVER $3,000,000	
ALL FIRMS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
$ 4.08	$ 5.63	$ 3.25	$ 4.34
15.48	17.28	16.67	16.57
2.94	6.39	5.53	8.05
0.13	0.00	1.07	1.17
1.11	1.76	0.61	0.48
23.74	31.06	27.13	30.61
2.01	0.00	6.21	0.35
31.05	16.79	26.67	24.08
1.79	4.07	4.10	4.66
34.85	20.86	36.98	29.09
0.25	4.16	3.56	2.08
58.84	56.08	67.67	61.78
169.95%	178.32%	147.78%	161.86%
$70.31	$69.34	$67.03	$63.16
10.77	11.63	13.62	10.68
16.03	10.82	12.37	11.09
97.11	91.79	93.02	84.93
2.89	8.21	6.98	15.07
4.91%	14.64%	10.32%	24.39%

REPORT ON OPERATIONS - SALES = 100%

	PRINTERS AND LITHOGRAPHERS**
	ALL FIRMS
SALES OR VALUE OF PRODUCT PRODUCED	100.00%
FACTORY COST OF PRODUCT	
MATERIALS	
Paper	0.00
Other chargeable materials	2.57
Outside services	8.63
TOTAL MATERIALS	11.20
FACTORY PAYROLL	42.98
FACTORY EXPENSES	19.67
TOTAL FACTORY COST OF PRODUCT	73.85
GROSS PROFIT	26.15
ADMINISTRATIVE AND SELLING EXPENSES	
Administrative expenses	12.33
Selling expenses	8.58
TOTAL ADMINISTRATIVE AND SELLING EXPENSES	20.91
INCOME BEFORE INTEREST EXPENSE	5.24
Interest expense	0.76
OPERATING INCOME	4.48
Other income (expense)	0.24
INCOME BEFORE INCOME TAXES	4.72

SUPPORTING SCHEDULES - SALES = 100%

OTHER CHARGEABLE MATERIALS	
Ink	0.00%
Film	0.18
Plates	0.00
Other chargeable materials	2.39
TOTAL OTHER CHARGEABLE MATERIALS	2.57
OUTSIDE SERVICES	
Composition	0.38
Offset preparation	2.35
Printing	3.71
Binding	0.00
Other outside services	2.19
TOTAL OUTSIDE SERVICES	8.63

** Sample insufficient for Profit Leaders.

ADVERTISING AGENCIES		BOOKS**	DIRECT BUYERS	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
100.00%	100.00%	100.00%	100.00%	100.00%
1.34	0.00	1.15	2.76	7.72
3.14	1.93	5.66	3.57	0.00
2.39	4.42	1.70	8.19	8.17
6.87	6.35	8.51	14.52	15.89
44.65	42.72	39.86	41.03	38.86
18.55	16.08	15.77	14.75	11.06
70.07	65.15	64.14	70.30	65.81
29.93	34.85	35.86	29.70	34.19
14.02	16.69	13.31	15.82	13.79
12.22	7.52	12.56	9.07	9.01
26.24	24.21	25.87	24.89	22.80
3.69	10.64	9.99	4.81	11.39
1.61	1.67	1.58	1.59	0.75
2.08	8.97	8.41	3.22	10.64
0.58	1.21	(0.09)	0.23	(0.53)
2.66	10.18	8.32	3.45	10.11
0.00%	0.00%	0.00%	0.04%	0.00%
1.28	1.93	2.54	2.92	0.00
0.00	0.00	0.00	0.33	0.00
1.86	0.00	3.12	0.28	0.00
3.14	1.93	5.66	3.57	0.00
0.68	0.00	0.00	0.26	0.00
0.00	0.00	0.00	0.15	0.00
0.00	0.00	0.00	6.38	8.17
0.00	0.00	0.00	0.05	0.00
1.71	4.42	1.70	1.35	0.00
2.39	4.42	1.70	8.19	8.17

SUPPORTING SCHEDULES - SALES = 100%

	PRINTERS AND LITHOGRAPHERS**
	ALL FIRMS
FACTORY PAYROLL	
Salaries - executive	4.04%
Direct wages	29.59
General factory salaries and wages	0.04
Packing, shipping and delivery wages	0.95
Payroll taxes	3.27
Employee benefits	5.09
TOTAL FACTORY PAYROLL	42.98
FACTORY EXPENSES	
Fixed Expenses	
Depreciation - real estate	0.35
Depreciation - other	6.15
Taxes - real estate	0.07
Taxes - other	0.18
Insurance	1.05
Building rent	3.13
Utilities - heat, light, etc.	0.56
Equipment rental	0.47
Total Fixed Expenses	11.96
Other Expenses	
Factory supplies and expense	2.47
Packing, shipping and delivery expense	0.01
Repairs and maintenance	4.65
Other factory expenses	0.58
Total Other Expenses	7.71
TOTAL FACTORY EXPENSES	19.67
ADMINISTRATIVE EXPENSES	
Salaries - executive	1.65
Salaries - office	0.43
Payroll taxes	0.11
Employee benefits	0.58
Bad debts	2.37
Office supplies and expenses	1.07
Professional fees	0.63
Taxes - business	0.03
Telephone	1.28
Other administrative expenses	4.18
TOTAL ADMINISTRATIVE EXPENSES	12.33
SELLING EXPENSES	
Salaries - executive	0.67
Salaries and commissions - salesmen	2.95
Salaries - sales office clerical	0.87
Payroll taxes	0.33
Employee benefits	1.03
Advertising	1.87
Travel and entertainment	0.24
Other selling expenses	0.62
TOTAL SELLING EXPENSES	8.58

** Sample insufficient for Profit Leaders.

ADVERTISING AGENCIES		BOOKS**	DIRECT BUYERS	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
5.64%	0.00%	3.52%	3.85%	1.69%
21.91	13.01	29.48	28.46	31.02
7.83	20.10	1.46	1.18	0.00
2.87	3.75	0.19	2.08	2.10
3.14	3.66	3.71	3.10	2.60
3.26	2.20	1.50	2.36	1.45
44.65	42.72	39.86	41.03	38.86
0.05	0.00	0.00	0.00	0.00
4.25	4.87	3.96	4.09	4.84
0.02	0.00	0.00	0.00	0.00
0.18	0.00	0.23	0.17	0.21
0.85	0.49	0.88	1.17	1.22
2.04	2.08	2.87	2.31	1.54
1.01	0.89	1.42	0.73	0.58
2.60	0.00	1.43	1.51	0.00
11.00	8.33	10.79	9.98	8.39
2.25	3.88	0.33	1.64	0.64
1.01	0.49	1.63	1.42	0.97
2.00	1.50	2.69	1.38	1.06
2.29	1.88	0.33	0.33	0.00
7.55	7.75	4.98	4.77	2.67
18.55	16.08	15.77	14.75	11.06
5.22	4.85	7.23	5.86	6.63
3.28	5.28	0.95	2.93	0.73
0.42	0.49	0.34	0.47	0.58
0.82	1.77	0.45	0.50	0.24
0.65	0.54	0.26	0.15	0.20
0.69	0.99	0.66	0.51	0.44
0.70	0.51	0.83	1.05	0.82
0.11	0.01	0.01	0.82	0.00
0.63	0.56	0.84	0.94	0.97
1.50	1.69	1.74	2.59	3.18
14.02	16.69	13.31	15.82	13.79
3.47	0.00	0.40	0.66	0.00
4.00	5.00	4.06	5.90	7.30
0.44	0.00	2.26	0.00	0.00
0.44	0.33	0.47	0.42	0.60
0.36	0.14	0.29	0.38	0.36
0.87	0.68	1.40	0.56	0.10
1.04	0.28	1.83	0.74	0.50
1.60	1.09	1.85	0.41	0.15
12.22	7.52	12.56	9.07	9.01

BALANCE SHEET

	PRINTERS AND LITHOGRAPHERS**
	ALL FIRMS
ASSETS	
CURRENT ASSETS	
Cash	3.87%
Receivables	33.59
Inventories	7.05
Other current assets	1.59
TOTAL CURRENT ASSETS	46.10
FIXED ASSETS	
Real estate	21.39
Less: Accumulated depreciation	2.25
	19.14
Machinery and equipment	116.27
Less: Accumulated depreciation	85.60
	30.67
Other fixed assets	2.47
Less: Accumulated depreciation	1.63
	0.84
NET FIXED ASSETS	50.65
OTHER ASSETS	3.25
TOTAL ASSETS	100.00
LIABILITIES AND EQUITY	
CURRENT LIABILITIES	
Notes payable	5.55
Accounts payable	10.59
Other current liabilities	7.31
TOTAL CURRENT LIABILITIES	23.45
LONG-TERM LIABILITIES	49.69
TOTAL LIABILITIES	73.14
SHAREHOLDERS' AND PROPRIETORS' EQUITY	26.86
TOTAL LIABILITIES AND EQUITY	100.00

BALANCE SHEET RATIOS

CURRENT RATIO	1.97
QUICK RATIO	1.67
TOTAL LIABILITIES TO EQUITY	2.72
LONG-TERM LIABILITIES TO EQUITY	1.85
ACCUMULATED DEPRECIATION - MACHINERY AND EQUIPMENT TO TOTAL MACHINERY AND EQUIPMENT	0.74

** Sample insufficient for Profit Leaders.

ADVERTISING AGENCIES		BOOKS**	DIRECT BUYERS	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
10.09%	17.39%	12.72%	6.23%	12.84%
34.72	36.14	42.38	45.64	43.73
6.06	3.74	16.28	6.90	7.90
7.29	1.62	4.36	5.41	7.86
58.16	58.89	75.74	64.18	72.33
3.06	0.00	0.00	4.16	1.09
1.62	0.00	0.00	1.16	1.09
1.44	0.00	0.00	3.00	0.00
69.30	95.52	84.27	64.52	65.41
35.68	55.37	67.60	40.96	45.78
33.62	40.15	16.67	23.56	19.63
5.77	4.60	16.39	6.42	5.50
3.11	3.64	11.57	1.92	1.57
2.66	0.96	4.82	4.50	3.93
37.72	41.11	21.49	31.06	23.56
4.12	0.00	2.77	4.76	4.11
100.00	100.00	100.00	100.00	100.00
15.49	8.48	6.36	10.27	10.22
6.38	3.76	7.76	19.34	1.36
8.60	20.59	15.26	8.50	10.72
30.47	32.83	29.38	38.11	22.30
22.82	10.11	24.89	31.03	26.99
53.29	42.94	54.27	69.14	49.29
46.71	57.06	45.73	30.86	50.71
100.00	100.00	100.00	100.00	100.00
1.91	1.79	2.58	1.68	3.24
1.71	1.68	2.02	1.50	2.89
1.14	0.75	1.19	2.24	0.97
0.49	0.18	0.54	1.01	0.53
0.51	0.58	0.80	0.63	0.70

SIGNIFICANT FACTS

	PRINTERS AND LITHOGRAPHERS**
	ALL FIRMS
INVESTMENT	
Average assets per employee - All employees	$ 21,764
Average assets per factory employee (Excluding Executives)	27,704
Average net worth per employee - All employees	6,762
Average gross plant investment per factory employee (Excluding Executives)	35,338
Net worth percentage of fixed assets	43.98%
EMPLOYEES	
Percent factory - All employees	90.24%
Percent administrative - All employees	2.19
Percent sales - All employees	7.57
SALES - VALUE OF PRODUCT PRODUCED INCLUDING EXECUTIVES	
Sales per employee - All employees	$ 43,478
Sales per factory employee	47,643
Sales less material per factory employee	41,818
Sales per administrative employee	391,731
EXCLUDING EXECUTIVES	
Sales per employee - All employees	46,446
Sales per factory employee	51,363
Sales less material per factory employee	45,488
SALES PER SALESMAN	2,585,667
SALES TO CURRENT ASSETS	463%
PAYROLL - INCLUDING TAXES AND BENEFITS INCLUDING EXECUTIVES	
Total payroll percentage of sales	51.59%
Factory payroll percentage of gross plant investment	61.53
Payroll per employee - All employees	$ 20,762
Payroll per factory employee	19,995
Payroll per administrative employee	21,721
Payroll per sales employee	13,252
PAYROLL - EXCLUDING TAXES AND BENEFITS EXCLUDING EXECUTIVES	
Payroll per employee - All employees	$ 15,755
Payroll per factory employee	15,674
Payroll per administrative employee	6,200
Payroll per sales employee	9,142
EXECUTIVE PAYROLL	
Payroll per executive - All executives	14,789
Payroll per factory executive	11,602
Payroll per administrative executive	28,359
Payroll per sales executive	28,662
RECEIVABLES	
Collection period	59.2
PROFIT	
Gross profit percentage of sales	26.15%
Average gross profit per factory employee	$ 13,434
Income before taxes percentage of sales	4.72%
Average income before taxes per employee	$ 2,575

** Sample insufficient for Profit Leaders.

ADVERTISING AGENCIES		BOOKS**	DIRECT BUYERS	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
$ 19,673	$ 16,098	$ 18,387	$ 19,555	$ 17,060
29,325	24,027	24,685	27,212	21,755
8,953	8,887	9,857	6,956	8,620
22,192	21,262	21,223	18,683	15,619
140.38%	163.38%	210.44%	94.71%	269.76%
75.85%	69.19%	82.60%	75.42%	80.62%
15.75	26.64	7.27	13.65	9.69
8.40	4.17	10.13	10.93	9.69
$ 45,637	$ 35,046	$ 42,639	$ 48,718	$ 43,220
60,410	52,968	52,811	64,810	53,563
55,966	48,594	48,145	53,602	45,391
373,546	129,119	577,500	447,532	448,218
57,126	36,325	46,687	54,646	47,838
69,215	52,968	56,439	68,240	55,374
64,437	48,594	51,441	56,798	47,025
581,238	0	1,163,585	343,743	346,144
438%	394%	330%	425%	354%
63.12%	60.58%	56.31%	58.16%	55.29%
156.95	115.76	102.54	145.84	141.87
$ 28,991	$ 21,143	$ 23,750	$ 27,418	$ 24,183
26,907	22,430	20,794	25,160	21,064
33,053	15,103	51,082	36,149	36,127
53,196	29,233	33,154	36,443	38,427
$ 21,613	$ 17,633	$ 17,783	$ 21,701	$ 19,835
21,451	19,528	17,106	20,741	18,382
17,825	8,557	7,753	14,874	7,484
37,734	26,719	28,787	29,465	33,761
62,001	13,650	52,928	41,840	37,247
55,511	0	33,504	29,074	17,363
64,491	13,650	85,437	46,091	40,881
61,892	0	51,927	13,938	0
52.5	60.3	61.9	62.0	63.2
29.93%	34.85%	35.86%	29.70%	34.19%
$ 20,289	$ 18,651	$ 20,396	$ 20,605	$ 19,142
2.66%	10.18%	8.32%	3.45%	10.11%
$ 962	$ 3,709	$ 4,400	$ 2,244	$ 4,439

RETURN ON INVESTMENT - PER $100 OF SALES

	PRINTERS AND LITHOGRAPHERS**
	ALL FIRMS
INVESTMENT	
Current Assets:	
Cash	$ 1.14
Receivables	14.51
Inventories	5.31
Marketable securities	0.00
Other current assets	0.65
	21.61
Plant Investment:	
Land and building	16.11
Machinery and equipment	51.09
Other fixed assets	1.86
	69.06
Non-Current Assets	2.20
TOTAL INVESTMENT	92.87
INVESTMENT TURNOVER PER $100 OF SALES	107.68%
EARNINGS	
Cost of Product	$73.85
Selling Expenses	8.58
Administrative Expenses	12.33
	94.76
Income Before Interest, Other Income (Expense), and Taxes	5.24
RETURN ON INVESTMENT - INVESTMENT TURNOVER X INCOME	5.64%

** Sample insufficient for Profit Leaders.

ADVERTISING AGENCIES		BOOKS**	DIRECT BUYERS	
ALL FIRMS	PROFIT LEADERS	ALL FIRMS	ALL FIRMS	PROFIT LEADERS
$ 4.67	$ 8.31	$ 5.17	$ 3.18	$ 5.50
14.13	16.21	16.82	16.59	16.90
2.60	1.57	7.18	2.29	2.51
2.02	0.00	1.17	1.15	0.00
1.32	0.74	0.77	1.47	3.80
24.74	26.83	31.11	24.68	28.71
1.28	0.00	0.00	1.73	0.35
30.65	47.87	32.64	24.64	26.40
2.29	1.93	6.65	2.59	2.15
34.22	49.80	39.29	28.96	28.90
1.87	0.00	1.17	2.16	1.31
60.83	76.63	71.57	55.80	58.92
164.39%	130.50%	139.72%	179.21%	169.72%
$70.07	$65.15	$64.14	$70.30	$65.81
12.22	7.52	12.56	9.07	9.01
14.02	16.69	13.31	15.82	13.79
96.31	89.36	90.01	95.19	88.61
3.69	10.64	9.99	4.81	11.39
6.07%	13.89%	13.96%	8.62%	19.33%

ABSOLUTE DATA

	NUMBER OF PARTICIPATING FIRMS	AVERAGE FIRM REPORTING** TOTAL ASSETS	SALES OR VALUE OF PRODUCTION	TOTAL INCOME (LOSS)
TOTAL - ALL FIRMS	24	$1,307,000	$2,752,000	$ 153,000
TOTAL - PROFIT LEADERS*	6	1,426,000	3,160,000	453,000
BY SIZE OF FIRM				
ALL FIRMS				
0-$500,000	6	133,000	333,000	17,000
$500,000-$1,500,000	9	375,000	1,002,000	9,000
$1,500,000-$3,000,000	2	961,000	2,134,000	98,000
Over $3,000,000	7	3,612,000	7,250,000	470,000
PROFIT LEADERS				
0-$500,000	2	147,000	350,000	33,000
Over $3,000,000	2	3,646,000	8,048,000	1,209,000
BY MARKET				
ALL FIRMS				
Printers and Lithographers	2	3,299,000	4,467,000	(27,000)
Advertising Agencies	10	876,000	1,969,000	39,000
Books	2	3,337,000	7,042,000	1,036,000
Direct Buyers	8	1,071,000	2,640,000	155,000
PROFIT LEADERS				
Advertising Agencies	2	485,000	1,083,000	118,000
Direct Buyers	2	584,000	1,729,000	194,000

HOW THE NUMBERS ARE COMPUTED

The PIA Ratios are computed by the method of relative or common size. With this method each company's dollars are converted into a percentage to the total. Then these percentages are added in total and within a given sales class. This is a very simple way of avoiding what is known as self-weighting when various magnitudes are involved. With this method each company is given equal weight regardless of their size.

The following example illustrates how this calculation process eliminates the problem of the ratios' giving inordinate weight to the results of very large firms.

Firm	Sales	Factory Payroll	% of Sales: Firm's Ratio Factory Payroll	% of Sales: PIA Ratio Factory Payroll
A	$ 200,000	$ 60,000	30.0%	
B	500,000	100,000	20.0	
C	8,000,000	975,000	12.2	
			62.2% divided by 3 = 20.7%	

* "Profit Leaders" are those firms which earned 8% or greater pretax profits on sales.
** Unlike the ratios shown in this book, these figures are arithmetic averages.